

## Abstract

The present invention provides a method of designing a redox flow battery system that can prevent system efficiency loss caused by weak generation power or load power at the time of electric charge or discharge, without using any lead storage battery, and can also provide further improved system efficiency. In the present invention, generating equipment that varies irregularly in output of power generation is provided with the redox flow battery to smooth the output of power generation. An average value of output distribution of the battery with respect to the smoothed output of power generation and standard deviation are determined. Then, at least either of a specified output of the battery and a specified output of the converter for converting the battery output is determined based on the standard deviation.